

FIGURE 1

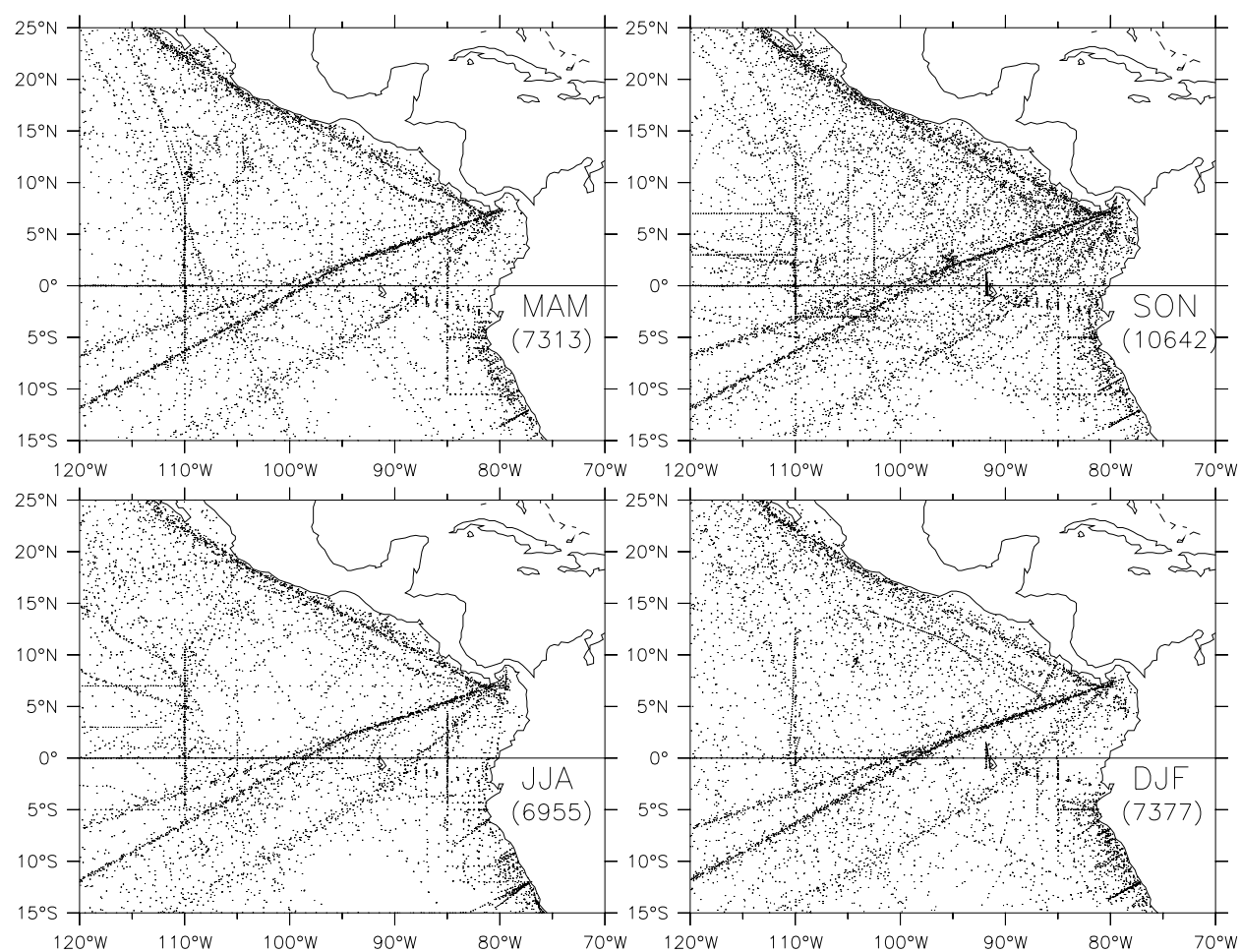


FIG. 1. Seasonal distribution of XBT data. The number in parenthesis under each season indicator gives the total number of profiles in the region during that period.

FIGURE 2

..... Insert color Figure 2 here

FIGURE 3

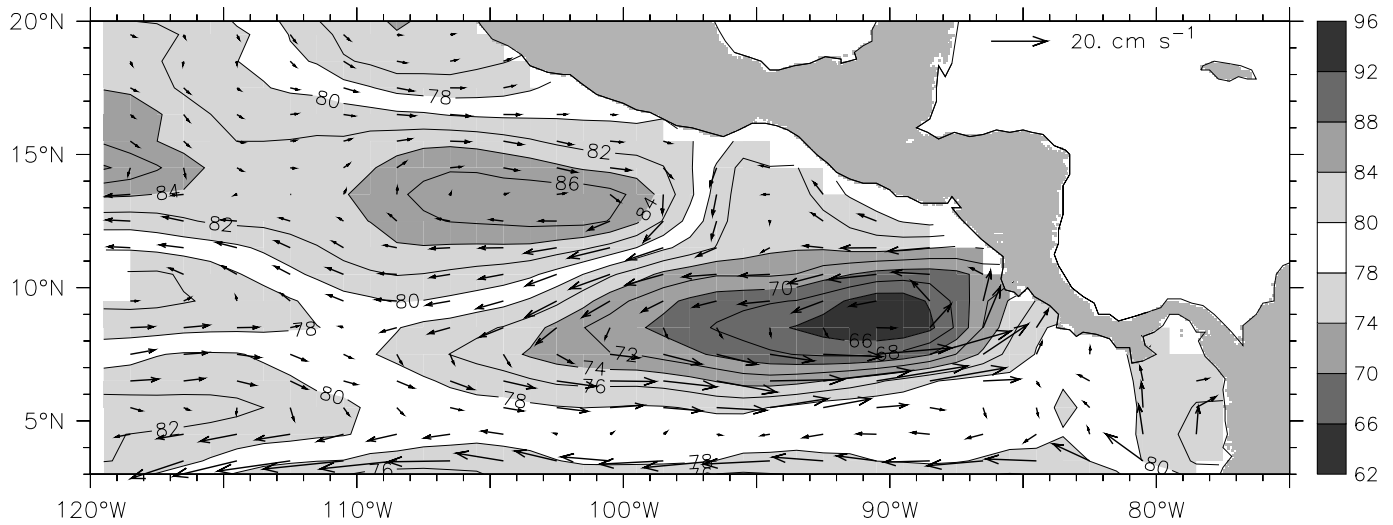


FIG. 3. Mean dynamic height and geostrophic currents at the surface relative to 300m, from the XBT data. Gray shading indicates dynamic heights above 80 dyn-cm or below 78 dyn-cm. The contour interval is 2 dyn-cm. The scale vector (20 cm s^{-1}) is located in the Caribbean.

FIGURE 4

..... Insert color Figure 4 here

FIGURE 5

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FIGURE 6

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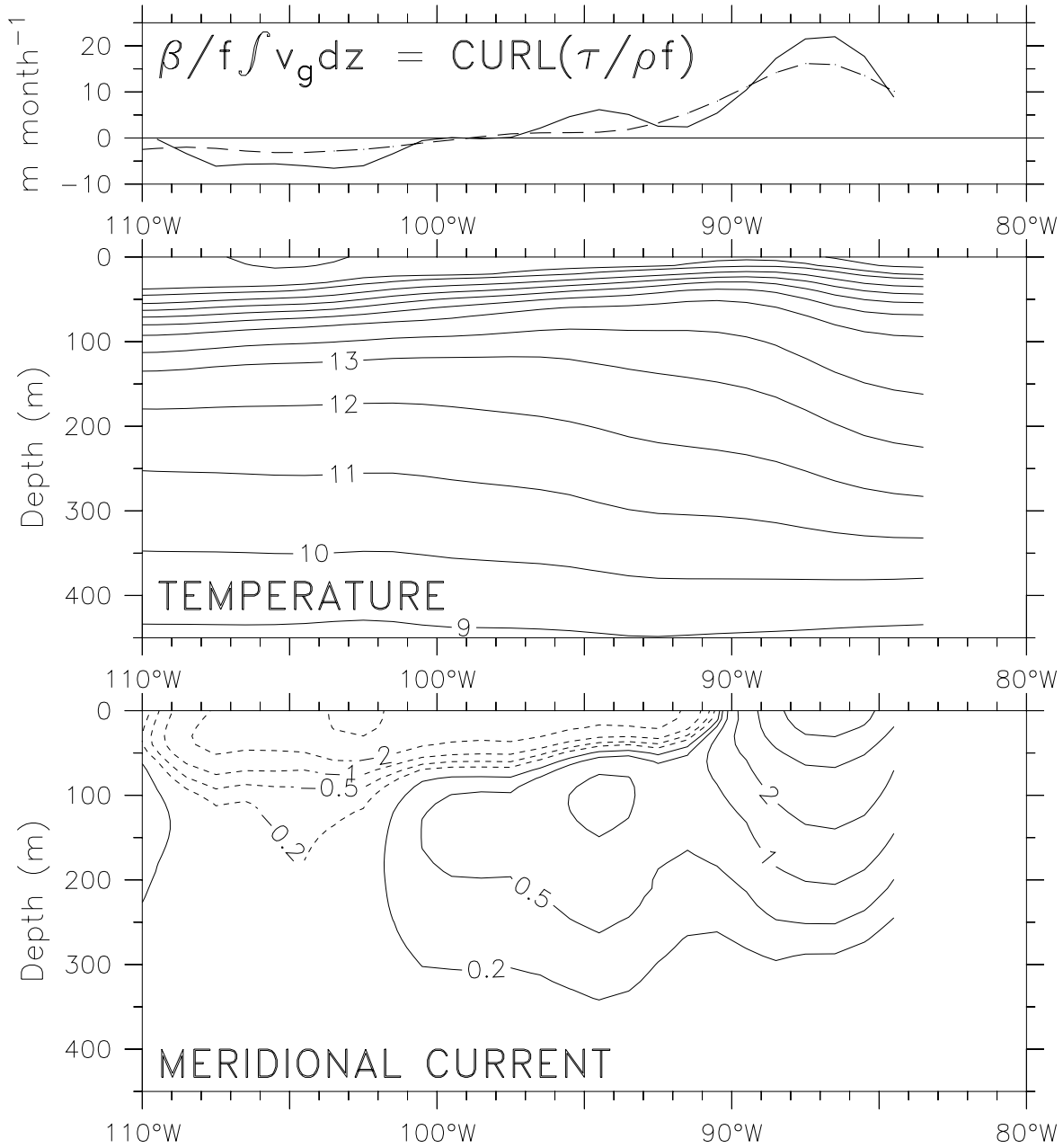
FIGURE 7

FIG. 7. Zonal section of the Sverdrup balance, $T(z)$ and $v_g(z)$ along 8.5°N . The coast is at 83°W . Top panel shows the “ocean term” (solid line) and “wind term” (dashed line) of the Sverdrup balance [see Eq. (2)]. Middle panel shows the temperature from the surface to 450m; the contour interval is 1°C from 8°C to 14°C , 2°C from 16°C to 26°C , and 1°C from 27°C to 29°C . Bottom panel shows the meridional geostrophic current from the surface to 450m; northward flow is indicated by solid contours, southward by dashed contours; the contour interval is every 5 cm s^{-1} within $\pm 15\text{ cm s}^{-1}$, then ± 1 and 2 cm s^{-1} , $\pm 0.5\text{ cm s}^{-1}$ and $\pm 0.2\text{ cm s}^{-1}$.

FIGURE 8

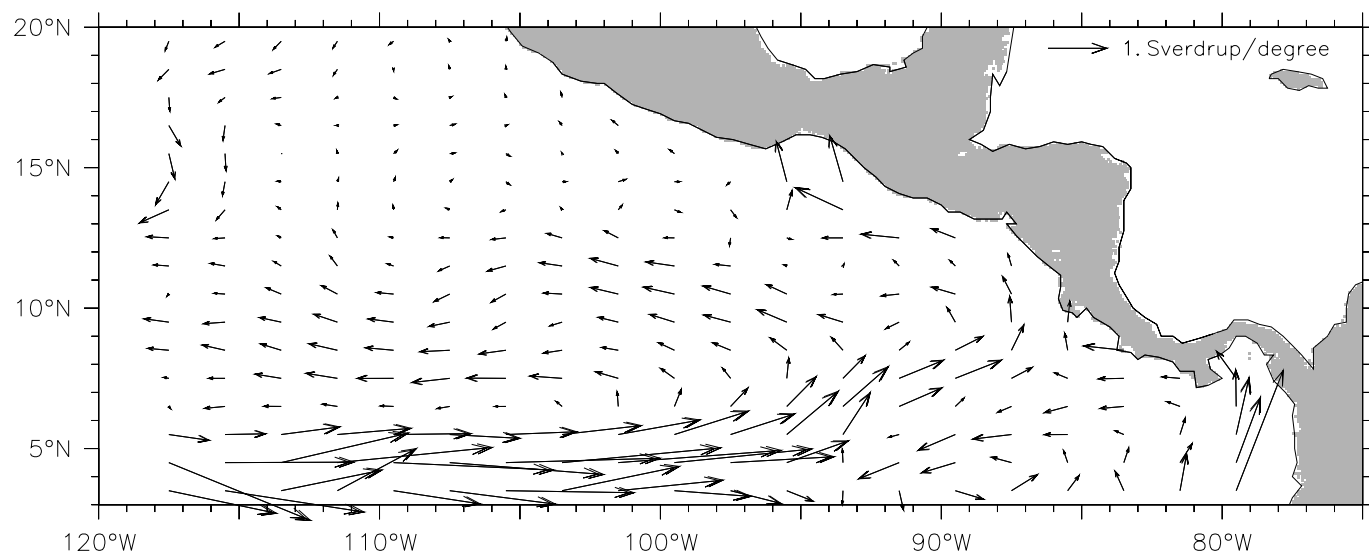


FIG. 8. Geostrophic transport vectors integrated from the 450m reference level to the 17°C isotherm (base of the thermocline). The scale vector (1 Sv per degree) is located in the Caribbean.

FIGURE 9

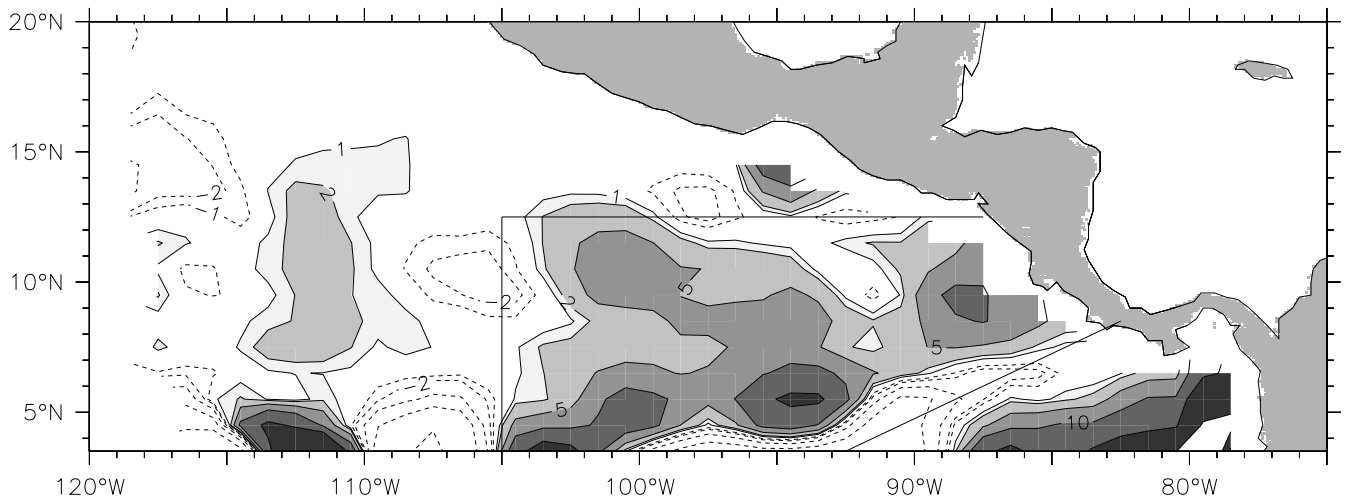


FIG. 9. Geostrophic transport across the 17°C isotherm ($w - \mathbf{u} \cdot \nabla h$) in units of m month^{-1} , where w is estimated from Eq. (4), \mathbf{u} is the geostrophic current on the isotherm, and h is the isotherm depth. Shaded areas (line contours) show upwelling across the isotherm; dashed contours show downwelling. The overlaid line outlines the area over which upwelling transport was integrated (section 4c.3).

FIGURE 10

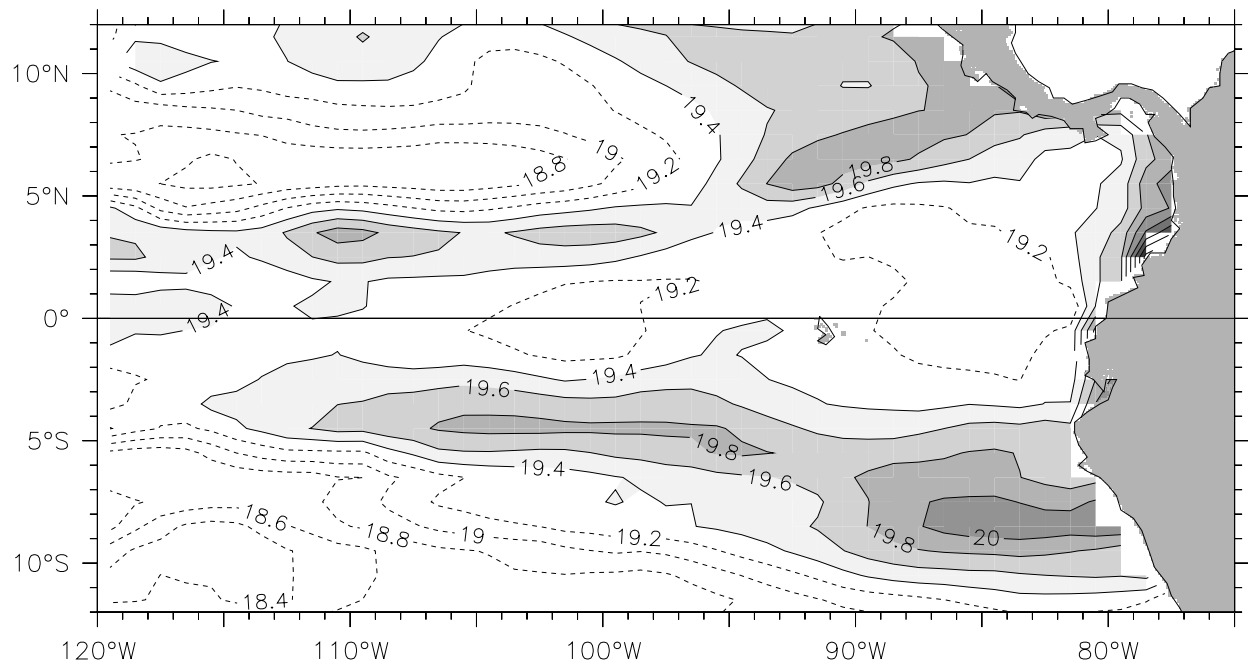


FIG. 10. Dynamic height at 300m relative to 450m between 12°S and 12°N. Shaded areas show high dynamic height, dashed contours low dynamic height (the contour interval is 0.2 dyn-cm).